

RHOCOCO rev 1.8 assembly list.xlsx

| Id | Designator | Designation | Package | # | bestel code |
|----|--|----------------------|---|----|-------------|
| 1 | <i>Connectors SMT (probably already done for you, otherwise start SMT soldering it first) Solder parts in the order of this list, low profile first.</i> | | | | |
| 2 | J6 | SD_Card holder (SMT) | SD-67600-006 | 1 | 2614945 |
| 3 | <i>Resistors (start with mounting these, then continue with higher profile parts)</i> | | | | |
| 4 | R14 | MF25 10R | Weerstand axiaal D1.6mm Pitch 3/10" 1% | 1 | 9341145 |
| 5 | R1,R3,R5,R7,R8 | MF25 240R | Weerstand axiaal D1.6mm Pitch 3/10" 1% | 5 | 9341587 |
| 6 | R12,R39 | MF25 270R | Weerstand axiaal D1.6mm Pitch 3/10" 1% | 2 | 9341633 |
| 7 | R2,R4,R6 | MF25 470R | Weerstand axiaal D1.6mm Pitch 3/10" 1% | 3 | 9341943 |
| 8 | R25,R26,R27,R28,R30,R31,R32,R33,R34,R35,R36,R37,R40 | MF25 1K | Weerstand axiaal D1.6mm Pitch 3/10" 1% | 13 | 9341102 |
| 9 | R11,R10 | MF25 4K7 | Weerstand axiaal D1.6mm Pitch 3/10" 1% | 2 | 9341951 |
| 10 | R9,R13,R15,R16,R22,R23,R24,R29,R38 | MF25 10K | Weerstand axiaal D1.6mm Pitch 3/10" 1% | 9 | 9341110 |
| 11 | R17,R18,R19,R20,R21 | MF25 100K | Weerstand axiaal D1.6mm Pitch 3/10" 1% | 5 | 9341129 |
| 12 | RN2 | 4K7 x 6 SIP | R_Array_SIP7 4607X-101-472LF | 1 | 2787743 |
| 13 | <i>Discrete passive semiconductors (mount these next)</i> | | | | |
| 14 | D1,D2,D3,D4,D5,D6,D7,D8,D9 | 1N4148 | Diode DO-35 3/10" Horizontaal | 9 | 9843680 |
| 15 | <i>IC sockets</i> | | | | |
| 16 | U2bis,U4bis | DIP-8 socket | Multicomp 2227MC-08-03-18-F1 | 10 | 1103844 |
| 17 | U3bis,U9bis,U10bis | DIP-16 socket | Multicomp 2227MC-16-03-09-F1 | 5 | 1103846 |
| 18 | U7bis | DIP-20 socket | Multicomp 2227MC-20-03-07-F1 | 5 | 1103848 |
| 19 | U8bis | DIP-32 Socket | Multicomp 2227MC-32-06-06-F1 | 1 | 1103853 |
| 20 | U1bis,U6bis | DIP-40 Socket | Multicomp 2227MC-40-06-05-F1 | 2 | 1103855 |
| 21 | <i>Connectors (low profile)</i> | | | | |
| 22 | J8 | CONN_01X06 | Socket_Strip SS-106-T-2-N 1x06 | 1 | 1668205 |
| 23 | Connector for Y1 (cut to size) | CONN_01X03 | Socket_Strip SS-106-T-2-N 1x03 | 1 | 1668205 |
| 24 | <i>Capacitors (start with low profile parts)</i> | | | | |
| 25 | C6 | 4.7nF | C_Disc_D3.4mm_W2.1mm_P2.50mm | 1 | 2860131 |
| 26 | C2 | 10nF | C_Disc_D3.4mm_W2.1mm_P2.50mm | 1 | 2309024 |
| 27 | C1,C3,C4,C9,C10,C11,C12,C13 | 100nF | Ceramic capacitor Radial_3/10" | 8 | 1692300 |
| 28 | <i>Capacitors (then the high profile parts)</i> | | | | |
| 29 | C7 | 10uF 25V | Elco Radial Diameter 5.0mm pitch 2.50mm | 1 | 9451153 |
| 30 | C5 | 100uF 16V | Elco Radial Diameter 6.3mm pitch 2.50mm | 1 | 9451080 |
| 31 | C8 | 220uF 10V | Elco Radial Diameter 6.3mm pitch 2.50mm | 1 | 1848418 |
| 32 | <i>Discrete active semiconductors</i> | | | | |
| 33 | Q1 | 2N3904 | TO-92_Molded_Narrow | 1 | 1574370 |

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| | | | | | |
|----|--|------------------------|--|---|------------|
| 34 | Q2 | 2N7000 | TO-92_Molded_Narrow | 1 | 9845178 |
| 35 | D10 | LED MCL034PD | LED 3.0mm RED round | 1 | 1581112 |
| 36 | <i>Connectors</i> | | | | |
| 37 | J9 | CONN_01X08 | Socket_Strip_Angled_1x08_Pitch2.54mm | 1 | 1668207 |
| 38 | J1,J11,LS1 | CONN_01X02 | Pin_Header_Straight_1x02_Pitch2.54mm | 3 | 1593411 |
| 39 | J5 | CONN_01X06 | Pin_Header_Straight_1x06_Pitch2.54mm | 1 | 1593415 |
| 40 | J7 | CONN_02X23 | Pin_Header_Angled_2x23_Pitch2.54mm | 1 | 2032893 |
| 41 | J2 | VGA | VGA_connector DB-15 high density DE | 1 | 2401275 |
| 42 | J3 | USB_B | USB-B-S-RA | 1 | 2112373 |
| 43 | J4 | Audio-Jack-3_2Switches | SPC21348 | 1 | 2579730 |
| 44 | J10 | DB9_MALE | dB09-MALE | 1 | 1099289 |
| 45 | Various (Y1 might be in a socket for the prototype, if not solder its base to a nearby GND trace for mechanical stability and shielding) | | | | |
| 46 | SW1 | SW_SPDT | SWITCH-300SP1J1BLKM6QE | 1 | 300SP1J1RE |
| 47 | Y1 | 5MHz | Crystal_HC49-U_Vertical | 1 | 1652566 |
| 48 | <i>Integrated circuits (mount into Sockets, beware of the orientation of U2, and U4)</i> | | | | |
| 49 | U1 | P8X32A | DIP-40_W15.24mm_Socket | 1 | RS 405-597 |
| 50 | U2 | 24LC256 | DIP-8_W7.62mm | 1 | 9757970 |
| 51 | U3 | PCF8574A | DIP-16_W7.62mm | 1 | 1703443 |
| 52 | U4 | LM386 | DIP-8_W7.62mm_Socket | 1 | 2496437 |
| 53 | U5 | MCP1700-3302E_TO92 | TO-92_Inline_Narrow_Oval 3V3 regulator | 1 | 1296588 |
| 54 | U6 | Z80CPU | DIP-40_W15.24mm_Socket | 1 | 1081891 |
| 55 | U7 | 74HCT574 | DIP-20_W7.62mm_Socket | 1 | 9592113 |
| 56 | U8 | AS6C1008 | DIP-32_W15.24mm_Socket | 1 | 1562896 |
| 57 | U9 | 74HCT365 | DIP-16_W7.62mm_Socket | 1 | 1739589 |
| 58 | U10 | 74HCT670 | DIP-16_W7.62mm | 1 | SN74LS670N |
| 59 | <i>Parts mounted external to PCB</i> | | | | |
| 60 | LS1 | Speaker | Speaker 8 Ohm | 1 | 2783054 |

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|---|--|--|--|----|---------|
| 1 | | | Keyboard | | |
| 2 | PB1 to PB50 | Multicomp MCDTS-2 series MC32874 12x12mm switch 160gf | MC32874 - Tactile Switch, MCDTS-2 Series, Top Actuated, Through Hole, Plunger for Cap, 160 gf, 50mA at 12VDC | 50 | 2543105 |
| 3 | Keycaps for PB1 to PB50 | KTSC-21I | Switch Cap, Multicomp MCDTS2 Series Tactile Switches, Ivory, Caps for MCDTS2 Series | 50 | 9561471 |
| 4 | J1 and J2 (15-way cable cut into two seperate parts, a six wire strip, and an eight wires strip, so remove one strip in between) | FSN-23A-15 | Ribbon Cable, Jumper Nomex Cable, Straight Pin, Straight Pin, 15 Ways, 3 ", 76.2 mm, 2.54 mm cut into a six-pin and a 8-pin part | 1 | 1310363 |